

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
Land Division
Honolulu, Hawaii 96813

July 22, 2016

Board of Land and Natural Resources
State of Hawaii
Honolulu, Hawaii

PSF No.: 08OD-110

OAHU

Acceptance of Final Environmental Impact Statement (FEIS) for Na Pua Makani Wind Power Project situate at Kahuku-Malaekahana, Koolauloa, Oahu, Tax Map Key: (1) 5-6-008:006.

APPLICANT:

Na Pua Makani Power Partners LLC, a Delaware limited liability company.

LEGAL REFERENCE:

Hawaii Revised Statutes (HRS) Section 343-5 and Hawaii Administrative Rules (HAR) Section 11-200-23.

LOCATION:

Portion of Government lands situate at Kahuku-Malaekahana, Koolauloa, Oahu, identified by Tax Map Key: (1) 5-6-008:006, as shown on the attached map labeled Exhibit A.

AREA:

231.927 acres, more or less.

ZONING:

State Land Use District: Agriculture
City and County of Honolulu LUO: Agricultural 1 and 2

TRUST LAND STATUS:

Non-ceded, government land acquired since statehood from the Estate of James

Campbell, Deceased.

DHHL 30% entitlement lands pursuant to the Hawaii State Constitution: NO

CURRENT USE STATUS:

Unencumbered.

CHARACTER OF USE:

Wind farm purposes.

DESCRIPTION OF PROJECT:

The proposed project is a wind farm located at Kahuku-Malaekahana, Koolauloa, Oahu. The applicant is requesting a direct lease pursuant to HRS Section 171-95 for a state owned parcel, TMK (1) 5-6-008:006, with an area of approximately 231.927 acres. The parcel was previously set aside to the Hawaii Department of Agriculture via Governor's Executive Order (EO) 3575 for Kahuku Agricultural Park purposes. In order to pursue the lease for the project, the parcel was withdrawn from EO 3575 by EO 4482, dated March 23, 2015. The state owned parcel is currently vacant. The applicant is also seeking to obtain a lease over adjacent private lands owned by Malaekahana Hui West, LLC, as well as access easements over state lands set aside to the Department of Agriculture. The total leased area plus the State-owned access is approximately 707 acres. Within the leased area, all proposed project activities would occur within a smaller approximately 464-acre project area.

Since a portion of the project will be constructed on state unencumbered land, the proposed lease serves a trigger for an Environmental Impact Statement (EIS) under HRS Section 343-5, and the Board of Land and Natural Resources (Board) would be the appropriate accepting authority. The preferred alternative for the project, identified as the Modified Proposed Action Option¹ in the FEIS, is a wind-farm consisting of a maximum of nine (9) turbines. The three blade turbines would reach up to a total height of 656 feet. The height of each tower would extend up to 443 feet. The rotor diameter would reach up to 427 feet with the blade length up to 208 feet. The rotor swept area would encompass up to 143,160 square feet. The cut-in wind speed is 10 feet per second and the cut-out wind speed is up to 82 feet per second.² The turbines would be capable

¹ A summary of the modifications undergone by the project is included in the Discussion section of this submittal. To the extent of staff's knowledge, the Modified Proposed Action represents the project as to be implemented.

² The cut-in wind speed is defined as the minimum wind speed at which the turbine blades overcome friction and begin to rotate. The cut-out wind speed is defined as the speed at which the turbine blades are brought to rest to avoid damage from high winds. Source: www.wind-power-program.com

of generating up to 3.45MW. Five of the turbines would be located on the State parcel, the remaining four turbines on private land.

The applicant is currently considering newer turbine models from leading turbine manufacturers including Siemens, Vestas, and GE. The turbine array could include a combination of models from a single manufacturer ranging in generating capacity and dimensions. The applicant would select the most appropriate turbines for the site-specific conditions of the wind farm site prior to construction. The proposed project would also include permanent facilities including access roads, overhead and underground transmission and collector lines, an onsite substation, and an operation and maintenance (O&M) building and associated storage yard and parking area. Temporary wind turbine assembly lay-down areas would also be used during construction.

PROPOSED ACTION:

The applicant is seeking a direct lease for the state owned parcel TMK (1) 5-6-008:006, pursuant to HRS Section 171-95, a use of state land under HRS Section 343-5(a)(1).

OBJECTIVE OF THE PROPOSED ACTION:

The primary purpose for the leasing of state land is the proposed construction of the wind farm project. Per the applicant's FEIS, the purpose is to provide clean, renewable wind energy for the island of Oahu, and to assist HECO in meeting Hawaii's Renewable Portfolio Standard (RPS) requirements and the State's goal to reduce electricity costs. Hawaii's Clean Energy Initiative sets goals for the state to achieve 100 percent clean energy by 2045 coming from locally generated renewable sources. The cost of electricity from renewable energy is currently about one-half the cost of electricity from burning oil and other non-renewable sources. Toward that end, the Project plans to begin operation in 2017. The power generated by the Project would be sold to HECO pursuant to the Purchase Power Agreement under a long-term, fixed-price contract with fixed annual escalation providing long-term price stability for consumers.

Additionally, the FEIS states that the applicant anticipates that operation of the proposed Project would contribute to the State's diversified portfolio of renewable energy projects, provide environmental and economic benefits to the State, County, and local communities, diversify Oahu's power supply, and contribute to the State's energy independence and security and reduce the import of foreign oil. Production of wind generated energy would replace a portion of the State's electricity that is currently generated by burning fossil fuels, thus reducing greenhouse gas (GHG) emissions and other forms of pollution that are detrimental to the environment and human health. The energy potentially generated by the proposed Project would eliminate the use of approximately 13.44 barrels of oil for every hour of operation, which in turn would reduce emissions of carbon dioxide (CO₂) and other air pollutants including sulfur dioxide (SO₂), nitrogen oxides (NO_x), and mercury (Hg).

FEIS ACCEPTABILITY EVALUATION:

Pursuant to HAR Section 11-200-23(b), a statement shall be deemed to be an acceptable document by the accepting authority or approving agency only if all of the following criteria are satisfied:

- 1) The procedures for assessment, consultation process, review and the preparation and submission of the statement, have all been completed satisfactorily as specified in this chapter;
- 2) The content requirements described in this chapter have been satisfied; and
- 3) Comments submitted during the review process have received responses satisfactory to the accepting authority, or approving agency, and have been incorporated in the statement.

The FEIS considered four alternatives, inclusive of a No Action alternative (Alternative 1). Alternative 2 and 3 consisted of the wind farm projects consisting of up to 10 and 12 turbines respectively. Alternative 2a is the Modified Proposed Action of up to 9 turbines described previously and designated the preferred alternative. However, the turbines included in Alternatives 2 and 3 would have a shorter height of 512 feet. The FEIS evaluated the direct, indirect and cumulative effects of the various alternatives against a range of environmental categories including geology and soils; hydrology and water resources; air quality and climate change; noise; hazardous and regulated materials and wastes; natural hazards; vegetation; wildlife; threatened and endangered species; socioeconomic; historic, archaeological and cultural resources; land use; recreation and tourism; visual resources; transportation; public health and safety; environmental justice; public infrastructure; military interests; and agriculture.

The project EIS published the following public notices in the Hawaii Office of Environmental Quality Control Environmental Notice:

December 23, 2013:	EIS Preparation Notice (EISPN).
November 8, 2014:	Second EISPN, replacing the original EISPN due to project design changes.
June 8, 2015:	First Draft EIS, initiating 45 day public comment period.
April 23, 2016:	Second Draft EIS, initiating additional 45 day public comment period.

Additionally, the applicant conducted three public scoping meetings for the EIS preparation notices on November 13, 2013, January 10, 2014 and November 19, 2014. The applicant conducted public comment meetings, following the publication of the first and second draft environmental impact statements, on June 23, 2015 and May 25, 2016 respectively. The applicant also conducted outreach with various community associations in the project location and the adjacent areas. Furthermore, the FEIS

contains the applicant's responses to public comments received, both in favor and in opposition to the project. The primary issues of concern were the effects on visuals, noise, health and the take of threatened and endangered species, specifically the Hawaiian Hoary Bat. The applicant will address take issues related to endangered species by seeking Board approval of a Habitat Conservation Plan (HCP) for issuance of an Incidental Take License as well as consultation with the U.S. Fish and Wildlife Service for issuance of a federal Incidental Take Permit (ITP).

DISCUSSION:

Due to a significant change in the proposed project, the applicant produced a second draft EIS for public review and comment. The first draft EIS contemplated the project as a ten turbine project as described in Alternative 2. After the closure of the public comment period, the applicant produced a draft FEIS dated February 2016 which incorporated the Modified Proposed Action as Alternative 2a. Since Alternative 2a was not included in the first draft EIS that was published in the Environmental Notice, the public did not receive notice and was not provided an opportunity to comment on the Modified Proposed Action. The following is the applicant's rationale for the Modified Proposed Action:

"In response to public comments on the original Draft EIS related to visual impacts and consideration of fewer turbines with larger generating capacities (to reduce the total number of turbines), [applicant] reevaluated the proposed turbine locations and turbine models considered in the original Draft EIS. Through this effort, [applicant] was able to reduce the maximum number of turbines needed to meet the target generating capacity for the Project. This modification takes advantage of recent technological advancements that have resulted in the availability of uprated versions of turbine models that are have increased generating capacity, more efficient, and taller and are better suited for the existing wind conditions of the wind farm site than previous models."

Concerns were raised that the Modified Proposed Action represented a significant change to the project, so the public must receive adequate public notice and be provided an opportunity to comment on the alternative prior to the Board accepting the FEIS. After Land Division consulted with the Department of the Attorney General and Land Division's discussions with the applicant, it was decided to require the applicant to provide a second draft EIS including the Modified Proposed Action for publication in the Environmental Notice. The second draft EIS including the Modified Proposed Action was published in April 2016 and the applicant held a second public comment meeting on May 25, 2016. Now that the public has been afforded the opportunity to comment on the revised project, staff brings the FEIS is before the Board recommending acceptance and final publication in the Environmental Notice.

In addition to the public comment period required by HRS Chapter 343, this project also requires additional Board approvals for the direct lease and HCP, giving the public additional opportunities to testify in the project in an open, sun-shined meeting.

Furthermore, as previously noted, the project requires an ITP from the U.S. Fish and Wildlife Service. In order to obtain the ITP, applicant conducted an EIS in conformity with the National Environmental Protection Act (NEPA) requirements as well. However, it should be noted that the applicant was not required to complete a second draft EIS for the ITP since NEPA provides for an additional public comment period following the publication of the final EIS. Board members will receive electronic copies of the FEIS for their review. A copy of the complete FEIS can be found at:

<http://dlnr.hawaii.gov/ld/na-pua-makani-wind-project-final-eis/>

RECOMMENDATION:

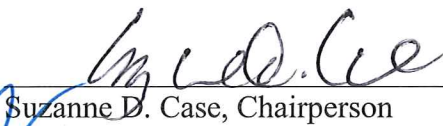
That the Board accept the Final Environmental Impact Statement for the Na Pua Makani Wind Power Project located at Kahuku-Malaekahana, Koolauloa, Oahu, Tax Map Key: (1) 5-6-008:006.

Respectfully Submitted,



Ian Hirokawa
Special Projects Coordinator

APPROVED FOR SUBMITTAL:



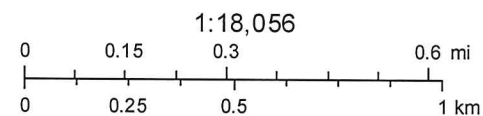
Suzanne D. Case, Chairperson

Public Land Trust Information System



July 6, 2016

EXHIBIT "A"



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and